

weaker bill, a slightly more rounded wing, and the claw of the hinder toe weaker and longer.

Possibly other birds of this form may be found in South America; and then it will be necessary to form them into a distinct genus.

3. List of the Butterflies of Costa Rica, with Descriptions of new Species. By ARTHUR G. BUTLER, F.L.S., F.Z.S., Senior Assistant in the Zoological Department, British Museum, and HERBERT DRUCE, F.L.S., F.Z.S., &c.

[Received May 16, 1874.]

The present list is founded chiefly upon the large collection brought over to England a year or two ago by Dr. Van Patten, and which was perhaps the most complete that ever has or will come from that locality. It was, however, made entirely at or in the neighbourhood of Cartago; and therefore we may still look for novelties from other parts of Costa Rica. Six new species are added in this paper.

A former communication on the collection made by Dr. Van Patten was read before the Society in July 1872; but as we wished to make it a complete list, and to add a few notes on some of the species, it was subsequently withdrawn.

The Moths collected by Dr. Van Patten being almost all day-fliers, would give but a poor idea of the Heterocerous fauna of Cartago, not to speak of Costa Rica; and as we have neither time nor inclination to collate the whole of the descriptions of species in this suborder, we have not included any of them in the present paper.

Family NYMPHALIDÆ (Westwood), Bates.

Subfamily DANAINÆ, Bates.

Genus 1. DANAIS, Latreille.

1. DANAIS CLEOTHERA.

Danais cleotera, Godart, Enc. Méth. ix. p. 185. n. 31 (1819); Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 12. fig. 2 (1847).

2. DANAIS ARCHIPPUS.

Papilio archippus, Fabricius, Sp. Ins. p. 55. n. 243 (1781).

Papilio plexippus, Cramer (*nec* Linn.), Pap. Exot. i. pl. 3. figs. A, B (1775).

Genus 2. LYCOREA, Doubleday.

3. LYCOREA ATERGATIS.

Lycorea atergatis, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 16. fig. 1 (1847).

Genus 3. ITUNA, Doubleday.

4. ITUNA LAMIRUS.

Heliconius lamirus, Latreille, in Humb. & Bonpl. Obs. Zool. ii. p. 126, pl. 41. figs. 7, 8 (1811?).

Section *Heliconoid Danainæ*.

Genus 4. OLYRAS, Doubleday.

5. OLYRAS INSIGNIS.

Olyras insignis, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 163. n. 1 (1869).

6. OLYRAS MONTAGUI.

Olyras montagui, Butler, Trans. Ent. Soc. p. 490 (1870); Lep. Exot. pl. 50. fig. 1 (1873).
Formerly received from Bogota.

Genus 5. THYRIDIA *, Bates.

7. THYRIDIA MELANTHO.

Thyridia melantho, Bates, Ent. Mo. Mag. iii. p. 50. n. 87 (1866).
See Cist. Ent. pars vii. p. 151 (Oct. 1873).

Genus 6. CALLITHOMIA, Bates.

8. CALLITHOMIA HEZIA.

Ithomia hezia, Hewitson, Ex. Butt. i. *Ith.* pl. 4. fig. 21 (1853).

Genus 7. DIRCENNA, Doubleday.

9. DIRCENNA KLUGII.

Ceratinia klugii, Hübner, Zutr. ex. Schmett. figs. 801, 802 (1837).

10. DIRCENNA OLYRAS.

Ithomia olyras, Felder, Reise der Nov. Lep. ii. pl. 44. figs. 5, 6 ("1865").

11. DIRCENNA LONERA.

Dircenna lonera, Butler & Druce, Cist. Ent. v. p. 95 (July 1872); Lep. Exot. pl. 50. fig. 2 (1873).

12. DIRCENNA RELATA.

Dircenna relata, Butler & Druce, Cist. Ent. v. p. 95 (July 1872); Lep. Exot. pl. 50. fig. 3 (1873).

The two preceding species are both allied to *D. olyras*.

13. DIRCENNA GONUSSA.

Ithomia gonussa, Hewitson, Ex. Butt. i. *Ith.* pl. 16. fig. 100 (1855).

This has been confounded by some Lepidopterists with *I. sosunga* of Reakirt; the latter, however, belongs to the genus *Hymenitis*.

* Cramer's figure of *T. psidii* is that of a common *Thyridia*, and quite distinct from the species figured by Bates, which appears to be an undescribed *Methona*, exactly copying it in coloration. The latter is in the British Museum; and the name of *M. confusa* has been given to it: this will prevent the necessity of confounding the two genera, as proposed by Mr. Kirby (Cat. p. 19).

14. DIRCENNA EUCHYTMA.

Ithomia euchytma, Felder, Reise der Nov. Lep. ii. p. 357. n. 507 ("1865").

15. DIRCENNA XENOS.

Dircenna xenos, Bates, Ent. Mo. Mag. iii. p. 50. n. 88 (1866).

Genus 8. PTERONYMIA, Butler & Druce.

16. PTERONYMIA AZARA.

Ithomia azara, Hewitson, Ex. Butt. i. *Ith.* pl. 4. fig. 23 (1853).

17. PTERONYMIA SIMPLEX.

Ithomia simplex, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 168. n. 10 (1869).

18. PTERONYMIA ARTENA.

Ithomia artena, Hewitson, Ex. Butt. i. *Ith.* pl. 8. fig. 48 (1854).

19. PTERONYMIA SALVINIA.

Ithomia salvinia, Bates, Ent. Mo. Mag. i. p. 34. n. 19 (1864).
Obs. Seems to come very near to *I. gedera* of Hewitson.

20. PTERONYMIA PARVA.

Ithomia parva, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 168. n. 11 (1869).

21. PTERONYMIA OLYRILLA.

Pteronymia olyrilla, Butler & Druce, Cist. Ent. v. p. 96 (July 1872); Lep. Exot. pl. 50. fig. 6 (1873).

22. PTERONYMIA NOTILLA.

Pteronymia notilla, Butler & Druce, Cist. Ent. v. p. 96 (July 1872); Lep. Exot. pl. 50. fig. 7 (1873).

23. PTERONYMIA FULVIMARGO.

Pteronymia fulvimargo, Butler & Druce, Cist. Ent. v. p. 97 (July 1872); Lep. Exot. pl. 50. fig. 5 (1873).

24. PTERONYMIA LATILLA.

Ithomia latilla, Hewitson, Ex. Butt. i. pl. 6. fig. 32 (1854).

25. PTERONYMIA TUTIA.

Ithomia tutia, Hewitson, Ex. Butt. i. *Ith.* pl. 2. fig. 6 (1852).

Genus 9. ITHOMIA, Hübner.

26. ITHOMIA ADELPHINA, var.

Ithomia adelphina, Bates, Ent. Mo. Mag. iii. p. 52. n. 91 (1866).
Ithomia virginiana (part), Hewitson, Ex. Butt. i. *Ith.* pl. 18. fig. 111 (1856).

27. ITHOMIA PATILLA.

Ithomia patilla, Hewitson, Ex. Butt. i. pl. 2. fig. 2 (1852).

28. ITHOMIA TERRA.

Ithomia terra, Hewitson, Ex. Butt. i. *Ith.* pl. 3. fig. 16 (1852).

29. ITHOMIA HIPPOCRENIS.

Ithomia hippocrenis, Bates, Ent. Mo. Mag. iii. p. 51. n. 89 (1866).
Allied to *I. avella* and *diasia* of Hewitson.

30. ITHOMIA PLAGINOTA.

Ithomia plaginota, Butler & Druce, Cist. Ent. v. p. 95 (July 1872); Lep. Exot. pl. 50. fig. 4 (1873).

31. ITHOMIA HERALDICA.

Ithomia heraldica, Bates, Ent. Mo. Mag. iii. p. 51. n. 90 (1866).

Genus 10. HYMENITIS, Hübner.

32. HYMENITIS OTO.

Ithomia oto, Hewitson, Ex. Butt. i. *Ith.* pl. 7. fig. 39 (1854).

33. HYMENITIS NERO.

Ithomia nero, Hewitson, Ex. Butt. i. *Ith.* pl. 7. fig. 37 (1854).

34. HYMENITIS LYRA.

Ithomia lyra, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 169. n. 13 (1869).

35. HYMENITIS NEPHELE.

Ithomia nephele, Bates, Trans. Linn. Soc. xxiii. p. 548. n. 23 (1862).

36. HYMENITIS ANNETTA.

Heliconia annette, Guérin, Icon. Règne Anim. Ins. texte, p. 470 (1844).

37. HYMENITIS ZAVALETTA.

Ithomia zavaletta, Hewitson, Ex. Butt. i. *Ith.* pl. 9. fig. 49 (1854).

Genus 11. LEUCOTHYRIS, Butler & Druce*.

38. LEUCOTHYRIS VICINA.

Ithomia vicina, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 169. n. 12 (1869).
Allied to *L. zea* and *L. makrena*.

39. LEUCOTHYRIS VICTORINA.

Heliconia victorine, Guérin, Ic. Règne Anim. Ins. texte, p. 470 (1844).

Ithomia victorina, Hewitson, Ex. Butt. i. *Ith.* pl. 13. fig. 75 (1855).

* This is one of the most easily recognized of all the genera of the *Ithomia* group.

40. LEUCOTHYRIS CASSOTIS.

Ithomia cassotis, Bates, Ent. Mo. Mag. i. p. 35. n. 21 (1864).

41. LEUCOTHYRIS RUBESCENS.

Leucothyris rubescens, Butler & Druce, Cist. Ent. v. p. 97 (1872); Lep. Exot. pl. 50. fig. 9 (1873).

Genus 12. SCADA, Kirby (*Oleria*, Bates).

42. SCADA XANTHINA.

Oleria xanthina, Bates, Ent. Mo. Mag. iii. p. 52. n. 92 (1866).

43. SCADA? EURIMEDIA.

Papilio eurimedia, Cramer, Pap. Exot. ii. pl. 126. figs. C, D (1779).

This species ought perhaps to form the type of a new genus; it seems sufficiently distinct from *Scada* (*Oleria*, Bates).

Genus 13. CERATINIA, Hübner.

44. CERATINIA CALLISPILA.

Ceratinia callispila, Bates, Ent. Mo. Mag. iii. p. 85. n. 93 (1866).

45. CERATINIA FENESTELLA.

Ithomia fenestella, Hewitson, Ex. Butt. i. *Ith.* pl. 5. fig. 25 (1854).

Genus 14. NAPEOGENES, Bates.

46. NAPEOGENES EXCELSA.

Ithomia excelsa, Felder, Wien. ent. Mon. vi. p. 415. n. 118 (1862); Reise der Nov. Lep. ii. pl. 44. fig. 13 (1867) [*Ceratinia excelsa*].

47. NAPEOGENES TOLOSA.

Ithomia tolosa, Hewitson, Ex. Butt. i. *Ith.* pl. 12. fig. 72 (1855).

Genus 15. MECHANITIS, Fabricius.

48. MECHANITIS ISTHMIA.

Mechanitis isthmia, Bates, Proc. Zool. Soc. p. 247. n. 18, pl. 29. fig. 1 (1863).

49. MECHANITIS DORYSSUS.

Mechanitis doryssus, Bates, Ent. Mo. Mag. i. p. 33. n. 16 (1864).

50. MECHANITIS MACRINUS.

Mechanitis macrinus, Hewitson, Ex. Butt. ii. *Mech.* pl. 3. fig. 11 (1860).

Genus 16. MELINÆA, Hübner.

51. MELINÆA LILIS.

Mechanitis lilis, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 17. fig. 4 (1847).

52. *MELINÆA SCYLAX*.

Mechanitis scylax, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 412. n. 33 (1871).

Genus 17. *TITHOREA*, Doubleday.53. *TITHOREA DUENNA*.

Tithorea duenna, Bates, Ent. Mo. Mag. i. p. 56. n. 23 (1864).

54. *TITHOREA IRENE*.

Papilio irene, Drury, Ill. Ex. Ent. iii. pl. 38. fig. 1 (1782).

Subfamily SATYRINÆ, Bates.

Genus 18. *TAYGETIS*, Hübner.55. *TAYGETIS MERMERIA*.

Papilio mermeria, Cramer, Pap. Exot. i. pl. 96. fig. B (1779).

56. *TAYGETIS CHRYSOGONE*.

Taygetis chrysogone, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 60. fig. 4 (1851).

57. *TAYGETIS LEUCTRA*.

Taygetis leuctra, Butler, Cist. Ent. i. p. 19. n. 3 (1870); Lep. Exot. pl. liii. fig. 3 (1873).

58. *TAYGETIS THAMYRA*.

Papilio thamyra, Cramer, Pap. Exot. iii. pl. 242. fig. B (1782).

59. *TAYGETIS SATYRINA*.

Taygetis satyrina, Bates, Ent. Mo. Mag. i. p. 179. n. 72 (1865).

60. *TAYGETIS UMBRACEA*.

Taygetis umbracea, Butler & Druce, Cist. Ent. v. p. 98 (July 1872); Lep. Exot. pl. liii. fig. 2 (1873).

61. *TAYGETIS INCERTA*.

Taygetis incerta, Butler & Druce, Cist. Ent. v. p. 98 (July 1872); Lep. Exot. pl. liii. fig. 1 (1873).

Genus 19. *EUPTYCHIA*, Hübner.62. *EUPTYCHIA OCIRRHOË*.

Papilio ocirrhoë, Fabricius, Gen. Ins. p. 260. nn. 216, 217 (1776).

Oreas strigata ocyrrhoë, Hübner, Samml. ex. Schmett. (1806-16).

63. *EUPTYCHIA CAMERTA*.

Papilio camerta, Cramer, Pap. Exot. iv. pl. 295. fig. F (1782).

64. EUPTYCHIA PIERIA.

Euptychia pieria, Butler, Proc. Zool. Soc. p. 463. n. 13, pl. 39. fig. 3 (1866).

65. EUPTYCHIA USITATA.

Euptychia usitata, Butler, Proc. Zool. Soc. p. 463. n. 11, pl. 39. fig. 2 (1866).

66. EUPTYCHIA DISAFFECTA, n. sp.

Wings above olivaceous brown, outer margin slightly darker, fringe pale; secondaries with a well-defined subanal ocellus, white-pupilled, with testaceous iris; two submarginal slightly undulated blackish lines, and between the outer one and the margin a pale brown line: head and thorax blackish, abdomen paler brown; underside paler than above, densely but indistinctly irrorated with red-brown; base greyish: two central nearly straight transverse red-brown lines, slightly diverging to costa of primaries; area immediately beyond them pale; two slightly irregular submarginal dark-brown lines; outer margin black: secondaries with six small ocelli, the fifth largest; the first, second, and fifth black, white-pupilled, with indistinct testaceous iris; the others brown, only visible with the aid of a lens: body greyish brown. Expanse 1 inch 10 lines.

Nearly allied to *E. variabilis*, but differing entirely in the central lines on under surface, which are more like those of *E. usitata*; its natural position will be between *E. variabilis* and *E. angularis*.

67. EUPTYCHIA RENATA.

Papilio renata, Cramer, Pap. Exot. iv. pl. 326. fig. A (1782).

68. EUPTYCHIA FALLAX.

Neonympha fallax, Felder, Wien. ent. Mon. vi. p. 177. n. 157 (1862).

69. EUPTYCHIA HERMES.

Papilio hermes, Fabricius, Syst. Ent. p. 487. n. 195 (1775).

Oreas strigata canthe, Hübner, Samml. ex. Schmett. (1806-16).

70. EUPTYCHIA WESTWOODII.

Euptychia westwoodii, Butler, Proc. Zool. Soc. p. 481. n. 68, pl. 12. fig. 3 (1867).

71. EUPTYCHIA LIBYE.

Papilio libye, Linnæus, Syst. Nat. 1, ii. p. 772. n. 146 (1766); Sulzer, Gesch. Ins. p. 145, pl. 17. fig. 7 (1776).

72. EUPTYCHIA TIESSA.

Euptychia tiessa, Hewitson, Equat. Lep. p. 37. n. 67 (1869); Butler, Lep. Exot. i. pl. 18. fig. 4 (1870).

73. EUPTYCHIA ARNÆA.

Papilio arnæa, Fabricius, Gen. Ins. p. 260 (1777).

Papilio ebusa, Cramer, Pap. Exot. iv. pl. 292. figs. F, G (1782).

74. EUPTYCHIA PYRACMON.

Euptychia pyracmon, Butler, Proc. Zool. Soc. p. 499. n. 118 (1866), pl. 11. fig. 10 (1867).

75. EUPTYCHIA ITHAMA.

Euptychia ithama, Butler, Lep. Exot. i. pl. 4. fig. 4 (1869).

76. EUPTYCHIA ARGENTELLA.

Euptychia argentella, Butler & Druce, Cist. Ent. v. p. 98 (July 1872).

77. EUPTYCHIA INSOLATA.

Euptychia insolata, Butler & Druce, Cist. Ent. v. p. 99 (July 1872).

Genus 20. CALLITÆRA *, Butler.

78. CALLITÆRA MENANDER.

Papilio menander, Drury, Ill. Ex. Ent. iii. pl. 38. fig. 3 (1782).

Genus 21. HETÆRA, Fabricius.

79. HETÆRA DIAPHANA.

Hætera diaphana, Lucas, in Ramon de la Sagra's Hist. de l'Ile de Cuba (Insectes), p. 587 (1857).

A specimen of this species from Costa Rica, only differing from ordinary examples in its slightly superior size, is in the collection of H. Druce, Esq.

Genus 22. PIERELLA, Westwood.

80. PIERELLA LUNA.

Papilio luna, Fabricius, Ent. Syst. 3, i. p. 109. n. 336 (1793).

81. PIERELLA HELVINA.

Hætera helvina, Hewitson, Ex. Butt. ii. pl. xlii. fig. 4 (1860).

Genus 23. PEDALIODES, Butler.

82. PEDALIODES PERPERNA.

Pronophila perperna, Hewitson, Trans. Ent. Soc. ser. 3, vol. i. p. 16. n. 39 (1862).

83. PEDALIODES MANIS.

Pronophila manis, Felder, Reise der Nov. Lep. iii. p. 469. n. 799 (1867).

* In Kirby's Catalogue, p. 36, this genus is sunk as a synonym of *Cithærias*, a genus equivalent to *Hetera* of Fabricius, and as such rejected in Westwood and Hewitson's 'Genera of Diurnal Lepidoptera.' It contained four species (the first and last of which are not *Callitæræ*), and possessed no certain type.

84. PEDALIODES HULDA.

Pedaliodes hulda, Butler & Druce, Cist. Ent. v. p. 99 (July 1872).

85. PEDALIODES LITHOCHALCIS.

Pedaliodes lithochalcis, Butler & Druce, Cist. Ent. v. p. 100 (July 1872).

Genus 24. OXEOSCHISTUS, Butler.

86. OXEOSCHISTUS PUERTA.

Pronophila puerta, Westwood, Gen. Diurn. Lepid. p. 358. n. 3 note (1851); Hewitson, Ex. Butt. ii. *Pron.* pl. 2. fig. 12 (1860).

87. OXEOSCHISTUS EURIPHYLE.

Oxeoschistus euriphyle, Butler, Cist. Ent. iv. p. 73 (Jan. 1872); Lep. Exot. pl. lxii. fig. 6 (1874).

88. OXEOSCHISTUS SUBMACULATUS, n. sp.

Closely allied to *O. simplex*, rather larger; the tawny band above broader, the ocellate spots obsolescent; below the central band of secondaries rather broader, and the dentate silvery area towards apex more restricted, the external dentes not encroaching so far into the marginal border. Expanse of wings 3 inches 1 line.

If the species of *Oxeoschistus* showed any tendency to vary, this might be considered a variety of *O. simplex*.

89. OXEOSCHISTUS COTHON.

Oxeoschistus cothion, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 413. n. 37 (1869).

Genus 25. DRUCINA, Butler.

90. DRUCINA LEONATA.

Drucina leonata, Butler, Cist. Ent. iv. p. 72 (Jan. 1872); Lep. Exot. pl. xlix. fig. 5 (1873).

This was one of the most remarkable of the novelties sent home by Dr. Van Patten.

Genus 26. PRONOPHILA, Westwood.

91. PRONOPHILA TIMANTHES.

Pronophila timanthes, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 412. n. 36 (1869).

Genus 27. TISIPHONE, Hübner.

92. TISIPHONE HERCYNIA.

Tisiphone hercynia, Hübner, Samml. ex. Schmett. (1816-24).

Genus 28. CALIGO, Hübner.

93. CALIGO OILEUS.

Pavonia oileus, Felder, Wien. ent. Mon. v. p. 111. n. 106 (1861); Reise der Nov. Lep. iii. pl. 65. fig. 2 (1867).

94. CALIGO MEMNON.

Pavonia memnon, Felder, Reise der Nov. Lep. iii. p. 454. n. 753 (1867).

95. CALIGO EURYLOCHUS.

Papilio eurilochus, Cramer, Pap. Exot. i. pl. 33. fig. A, pl. 34. fig. A (1775).

96. CALIGO BUBOCULA.

Caligo bubocula, Butler, Cist. Ent. iv. p. 74 (Jan. 1872).

97. CALIGO AUTOMEDON.

Papilio automedon, Cramer, Pap. Exot. i. pl. 41. figs. A, B (1776).

Genus 29. DYNASTOR, Westwood.

98. DYNASTOR STYGIANUS.

Dynastor stygianus, Butler, Cist. Ent. iv. p. 73 (Jan. 1872); Lep. Exot. pl. 47. fig. 1 (Jan. 1873).

Genus 30. OPSIPHANES, Westwood.

99. OPSIPHANES CASSIÆ.

Papilio cassiæ, Linnæus, Mus. Lud. Ulr. p. 265 (1764); Cramer, Pap. Exot. ii. pl. 106. fig. A (1779).

Subfamily MORPHINÆ, Butler.

Genus 31. MORPHO, Fabricius.

100. MORPHO AQUARIUS.

Morpho aquarius, Butler, Cist. Ent. iv. p. 74 (Jan. 1872); Lep. Exot. pl. 41. fig. 1 (July 1872).

Morpho cypris and *sulkowskyi*, also in the collection, were, I believe, obtained from Bogota.

101. MORPHO MARINITA.

♂ ♀. *Morpho marinita*, Butler, Cist. Ent. iv. p. 75 (Jan. 1872); Lep. Exot. pl. 41. fig. 2 (July 1872).

102. MORPHO PELEIDES.

Morpho peleides, Kollar, Denkschr. Akad. Wien. math.-nat. Cl. i. p. 356. n. 14 (1850).

103. MORPHO AMATHONTE.

Morpho amathonte, Deyrolle, Ann. Soc. Ent. France, p. 211 (1860).

It seems doubtful whether this is distinct from *M. menelaus*.

104. MORPHO HYDORINA.

♂ ♀. *Morpho hydorina*, Butler, Cist. Ent. iv. p. 76 (Jan. 1872); Lep. Exot. pl. 42. fig. 2 (Oct. 1872).

Var. ♂. *Morpho limpida*, Butler, Cist. Ent. iv. p. 75 (Jan. 1872).

Subfamily NYMPHALINÆ, Bates.

Genus 32. SIDERONE, Hübner.

105. SIDERONE THEBAIS.

Siderone thebais, Felder, Wien. ent. Mon. vi. p. 422. n. 132 (1862); Reise der Nov. Lep. iii. pl. 60. figs. 6, 7 (1867).

Genus 33. PAPHIA, Fabricius.

106. PAPHIA ELECTRA.

Paphia electra, Westwood, Gen. Diurn. Lepid. p. 319. n. 12, note (1850); Hewitson, Ex. Butt. i. *Paph.* & *Sider.* figs. 1, 2 (1856).

107. PAPHIA XENOCLES.

Paphia xenocles, Westwood, Gen. Diurn. Lepid. p. 319. n. 11 note (1850).

108. PAPHIA HERBACEA.

Paphia herbacea, Butler & Druce, Cist. Ent. v. p. 100 (July 1872); Lep. Exot. pl. lx. fig. 3 (1874).

109. PAPHIA GLAUCE.

Nymphalis glauce, Felder, Wien. ent. Mon. vi. p. 119. n. 132 (1862).

110. PAPHIA INDIGOTICA.

Paphia indigotica, Salvin, Ann. Nat. Hist. ser. 4, vol. iv. p. 180. n. 30 (1869).

111. PAPHIA PROSERPINA ♀?

♂. *Paphia proserpina*, Salvin, Ann. Nat. Hist. ser. 4, vol. iv. p. 181. n. 32 (1869).

112. PAPHIA PITHYUSA.

Nymphalis pithyusa, Felder, Verh. zool.-bot. Ges. Wien, p. 473. n. 27 (1869).

Paphia eubæna, Boisduval, Léop. Guat. p. 50 (1870).

113. PAPHIA CHRYSOPHANA.

Paphia chrysophana, Bates, Ent. Mo. Mag. iii. p. 152. n. 109 (1866).

114. PAPHIA TITAN.

Nymphalis titan, Felder, Reise der Nov. Lep. iii. p. 447. n. 731, pl. 60. fig. 4 (1867).

115. PAPHIA CHÆRONEA.

Nymphalis chæronea, Felder, Wien. ent. Mon. v. p. 110. n. 104 (1861); Reise der Nov. Lep. iii. pl. 60. fig. 1 (1867).

116. PAPHIA RYPHEA.

Papilio ryphea, Cramer, Pap. Exot. i. pl. 48. figs. G, H (1779).

117. PAPHIA HELIE.

Papilio helie, Linnæus, Syst. Nat. 1, ii. p. 773. n. 152 (1766); Clerck's Icones, pl. 34. fig. 3 (1764).

118. PAPHIA GLYCERUM.

Paphia glycerium, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 50. fig. 1 (1850).

119. PAPHIA AMENOPHIS.

Nymphalis amenophis, Reise der Nov. Lep. iii. p. 449. n. 735 (1867).

120. PAPHIA IPHIS.

Nymphalis iphis, Latreille, Humb. Bonpl. Obs. Zool. ii. p. 80 (1811-23).

Nymphalis thamyris, Latreille, l. c. pl. 36. figs. 3, 4 (1811-23).

121. PAPHIA CENOMAIS.

Paphia cenomais, Boisduval, Léop. Guat. p. 51 (1870).

Genus 34. PROTOGONIUS, Hübner.

122. PROTOGONIUS CECROPS.

Protoponius cecrops, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 49. fig. 2 (1850).

Genus 35. PYCINA, Westwood.

123. PYCINA ZAMBA.

Pycina zamba, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 48. fig. 3 (1850).

Genus 36. AGANISTHOS, Boisduval.

124. AGANISTHOS ODIUS.

Papilio odius, Fabricius, Syst. Ent. p. 457. n. 60 (1775); Sulzer, Gesch. Ins. pl. 13. fig. 2 (1776).

Genus 37. MEGISTANIS, Westwood.

125. MEGISTANIS ACHERONTA.

Papilio acheronta, Fabricius, Syst. Ent. p. 501. n. 249 (1775).

Papilio cadmus, Cramer, Pap. Exot. i. pl. 22. figs. A, B (1779).

Kirby has referred this species, perhaps rightly, to the genus *Aganisthos*; in general appearance it is more like *A. odius* than the other species of *Megistanis*; a careful examination of its structure, however, will doubtless settle the question at once.

Genus 38. PREPONA, Boisduval.

126. PREPONA AMPHIMACHUS.

Papilio amphimachus, Fabricius, Syst. Ent. p. 457. n. 59 (1775); Boisduval, Cuv. Règne Anim. Ins. ii. pl. 139 bis. fig. 2 (1836).

127. PREPONA DEMOPHON.

Papilio demophon, Linnæus, Mus. Lud. Ulr. p. 215 (1764); Clerck's Icones, pl. 29. fig. 2, pl. 42. fig. 3 (1764).

128. PREPONA MEANDER.

Papilio meander, Cramer, Pap. Exot. i. pl. 12. figs. A, B (1775).

Genus 39. APATURA, Fabricius.

129. APATURA LAURENTIA.

Nymphalis laurentia, Godart, Enc. Méth. ix. p. 376. n. 86 (1823); Lucas, Léop. Exot. pl. 68. fig. 2 (1835).

130. APATURA LUCASII.

Apatura lucasii, Doubleday and Hewitson, Gen. Diurn. Lepid. pl. 45. fig. 2 (1850).

131. APATURA DRURYI.

Catargyria druryi, Hübner, Samml. ex. Schmett. (1816-41).

132. APATURA PLESAURINA.

Apatura plesaurina, Butler & Druce, Cist. Ent. v. p. 102 (July 1872); Lep. Exot. pl. lx. fig. 4 (1874).

An interesting mimic of *Heterochroa plesauze*. Dr. Boisduval refers the tropical-American species to a new genus (*Chlorippe*) on account of the green palpi; this character, however, fails in the present species, and therefore is proved to be useless.

133. APATURA PAVONII.

Nymphalis pavonii, Humboldt, Bonpl. Obs. Zool. i. p. 197, pl. 18. figs. 3, 4 (1811?).

Both sexes of this species came in Van Patten's collection.

Genus 40. HETEROCHROA, Boisduval.

134. HETEROCHROA PLESAURE.

Adelpha plesauze, Hübner, Zutr. ex. Schmett. figs. 231, 232 (1823).

135. HETEROCHROA BASILEA.

Papilio basilea, Cramer, Pap. Exot. ii. pl. 188. fig. D (1779).

136. HETEROCHROA IPHICLA.

Papilio iphicla, Linnæus, Mus. Lud. Ulr. p. 311 (1764); Cramer, Pap. Exot. ii. pl. 188. fig. D (1779).

137. HETEROCHROA EROTIA.

Heterochroa erotia, Hewitson, Ann. & Mag. Nat. Hist. xx. p. 259, pl. 20. fig. 3 (1847).

138. *HETEROCHROA LERNA*.

Heterochroa lerna, Hewitson, Ann. & Mag. Nat. Hist. xx. p. 257, pl. 20. fig. 4 (1847).

139. *HETEROCHROA FESSONIA*.

Heterochroa fessonia, Hewitson, Ann. & Mag. Nat. Hist. xx. p. 260, pl. 20. fig. 6 (1847).

140. *HETEROCHROA MELANTHO*.

Heterochroa melantho, Bates, Ent. Mo. Mag. i. p. 129. n. 57 (1864).

141. *HETEROCHROA DEMIALBA*.

Heterochroa demialba, Butler, Cist. Ent. iv. p. 77 (Jan. 1872); Lep. Exot. xii. pl. 38. fig. 3 (April 1872).

142. *HETEROCHROA TRACTA*.

Heterochroa tracta, Butler, Lep. Exot. xii. pl. 38. fig. 6 (1872).

143. *HETEROCHROA LACINA*.

Heterochroa lacina, Butler, Lep. Exot. xii. pl. 38. fig. 5 (1872).

144. *HETEROCHROA FELDERI*.

Heterochroa felderi, Boisduval, Lép. Guat. p. 45 (1870).

Genus 41. *CATAGRAMMA*, Boisduval.145. *CATAGRAMMA PACIFICA*.

Catagramma pacifica, Bates, Ent. Mo. Mag. iii. p. 135. n. 105 (1866).

146. *CATAGRAMMA LYCA*.

Catagramma lyca, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 28. fig. 4 (1847).

147. *CATAGRAMMA ATACAMA*.

Catagramma atacama, Hewitson, Ex. Butt. i. Cat. pl. 1. figs. 1, 2 (1852).

148. *CATAGRAMMA FAUSTINA*.

Catagramma faustina, Bates, Ent. Mo. Mag. iii. p. 134. n. 103 (1866).

149. *CATAGRAMMA TITANIA*.

Catagramma titania, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 177. n. 25 (1869).

150. *CATAGRAMMA PATELINA*.

Catagramma patelina, Hewitson, Ex. Butt. i. Cat. pl. 2. figs. 13, 14 (1853).

Genus 42. CALLICORE, Hübner.

151. CALLICORE ASTALA.

Catagramma astala, Guérin, Icon. Règne Anim. Ins. texte, p. 479 (1844).

152. CALLICORE EUCLIDES.

Erycina euclides, Latreille in Humb. Bonpl. Obs. Zool. i. p. 240, pl. 24. figs. 3, 4 (1811?).

153. CALLICORE EUPEPLA.

Callicore eupepla, Salvin and Godman, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 146 (1868).

Quite distinct from *C. metiscus*.

Genus 43. EUBAGIS, Boisduval.

154. EUBAGIS TITHIA.

Seronia tithia, Hübner, Zutr. ex. Schmett. figs. 391, 392 (1823).

155. EUBAGIS MYLITTA.

Papilio mylitta, Cramer, Pap. Exot. iii. pl. 253. figs. D, E (1782).

156. EUBAGIS DYONIS.

Dynamine dyonis, Hübner, Zutr. ex. Schmett. figs. 871, 872 (1837).

157. EUBAGIS EGÆA.

Papilio egæa, Fabricius, Syst. Ent. p. 496. n. 231 (1775); Donovan, Nat. Rep. i. pl. 12 (1823).

158. EUBAGIS SALPENZA.

Eubagis salpensa, Felder, Wien. ent. Monatschr. vi. p. 113. n. 97 (1862).

There are specimens in the British Museum from Bogota and Venezuela.

159. EUBAGIS THALASSINA.

Eubagis thalassina, Boisduval, Lép. Guat. p. 41 (1870).

Genus 44. NICA, Hübner.

160. NICA FLAVILLA.

Nymphalis flavilla, Godart, Enc. Méth. ix. p. 406. n. 185 (1823).
Nica flavilla, Hübner, Samml. ex. Schmett. (1816-24).

Genus 45. ECTIMA, Doubleday.

161. ECTIMA LIRIA.

Papilio liria, Fabricius, Ent. Syst. 3, i. p. 239. n. 747 (1793); Donovan, Ins. Ind. pl. 37. fig. 5 (1800).

162. *ECTIMA RECTIFASCIA*, n. sp.

Allied to *E. liria*; differs in its greater size, in the narrower oblique band of primaries, with a sharply defined uninterrupted inner edge; the ocelli of primaries larger and better-defined on both surfaces; the outer margin nearly straight; markings below broader and deeper in colour. Expanse 2 inches 1 line.

A well-marked and interesting species, differing entirely from all the known forms in the shape of the band of the primaries.

Genus 46. *AMPHIRENE*, Hübner.163. *AMPHIRENE EPAPHUS*.

Vanessa epaphus, Latreille in Humb. Bonpl. Obs. Zool. ii. p. 74, pl. 35. figs. 3, 4 (1811-19).

164. *AMPHIRENE SUPERBA*.

Amphirene superba, Bates, Ent. Mo. Mag. i. p. 161. n. 61 (1864).

Some examples have a good deal of red towards apex of front wings.

Genus 47. *VICTORINA*, Blanchard.165. *VICTORINA STENELES*.

Papilio steneles, Linnæus, Mus. Lud. Ulr. p. 218 (1764); Clerck's Icones, pl. 35. fig. 2 (1764).

Genus 48. *MARPESIA*, Hübner.166. *MARPESIA PELEUS*.

Papilio peleus, Sulzer, Gesch. Ins. pl. 13. fig. 4 (1776).

Genus 49. *MEGALURA*, Blanchard.167. *MEGALURA CORESIA*.

Nymphalis coresia, Godart, Enc. Méth. ix. p. 359. n. 31 (1823).
Marpesia zerynthia, Hübner, Samml. ex. Schmett. 1816-24.

168. *MEGALURA CHIRON*.

Papilio chiron, Fabricius, Syst. Ent. p. 452. n. 40 (1775).
Papilio marius, Cramer, Pap. Exot. iii. pl. 200. figs. D, E (1780).

169. *MEGALURA BERANIA*.

Timetes berania, Hewitson, Ex. Butt. i. *Tim.* pl. 1. fig. 1 (1852).

170. *MEGALURA MEROPS*.

Tymetes merops, Boisduval, Cuv. Règne Anim. Ins. ii. pl. 139. fig. 1 (1836).

171. *MEGALURA CORITA*.

Timetes corita, Westwood, Gen. Diurn. Lepid. p. 263 (1850).

172. *MEGALURA VALETTA*.

♀. *Megalura valetta*, Butler & Druce, Cist. Ent. v. p. 101 (July 1872); Lep. Exot. pl. lx. fig. 2 (1874).

173. MEGALURA IOLE.

Papilio iole, Drury, Ill. Ex. Ent. iii. pl. 38. fig. 2 (1782).

Genus 50. HYPANARTIA, Hübner.

174. HYPANARTIA LETHE.

Papilio lethe, Fabricius, Ent. Syst. 3, i. p. 80. n. 250 (1793);
Donovan, Ins. Ind. pl. 23. fig. 1 (1800).

175. HYPANARTIA GODMANII.

Eurema godmanii, Bates, Ent. Mo. Mag. i. p. 85. n. 44 (1864).
Eurema atropos, Felder, Reise der Nov. Lep. iii. p. 397. n. 588,
pl. 51. figs. 5, 6 (1867).

176. HYPANARTIA KEFERSTEINII.

Eurema kefersteinii, Doubleday & Hewitson, Gen. Diurn. Lepid.
pl. 24. fig. 4 (1848).

177. HYPANARTIA ARCÆI.

Eurema arcæi, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii.
p. 415. n. 45 (1869).

Genus 51. ANARTIA, Hübner.

178. ANARTIA FATIMA.

Papilio fatima, Fabricius, Ent. Syst. 3, i. p. 81. n. 252 (1793);
Donovan, Ins. Ind. pl. 31. fig. 2 (1800).

179. ANARTIA JATROPHÆ.

Papilio jatrophæ, Linnæus, Mus. Lud. Ulr. p. 289 (1764);
Cramer, Pap. Exot. iii. pl. 202. figs. E, F (1782).

Genus 52. JUNONIA, Hübner.

180. JUNONIA PALLENS.

Junonia pallens, Felder, Reise der Nov. Lep. iii. p. 401. n. 597
(1867).

Genus 53. PYRAMEIS, Hübner*.

181. PYRAMEIS CARDUI.

Papilio cardui, Linnæus, Faun. Suec. p. 276. n. 1054 (1761).

182. PYRAMEIS CARYE.

Ham. dec. Carye, Hübner, Samml. ex. Schmett. (1806-16).

Genus 54. EPIPHILE, Doubleday.

183. EPIPHILE ADRASTA.

Epiphile adrasta, Hewitson, Ex. Butt. ii. *Epiph.* pl. 2. figs. 9-11
(1861).

* This genus will probably become a synonym of *Nymphalis*. See Crotch in
Cist. Ent. iv. p. 60.

184. *EPIPHILE GRANDIS*.

Epiphile grandis, Butler, Cist. Ent. iv. p. 76 (Jan. 1872); Lep. Exot. pl. liv. fig. 4 (1873).

Genus 55. *TEMENIS*, Hübner.185. *TEMENIS ARIADNE*.

Papilio ariadne, Cramer, Pap. Exot. ii. pl. 180. figs. E, F (1779).

Genus 56. *MYSCELIA*.186. *MYSCELIA PATTENIA*.

Myscelia pattenia, Butler & Druce, Cist. Ent. v. p. 101 (July 1872); Lep. Exot. pl. lx. fig. 1 (1874).

Genus 57. *EPICALIA*, Westwood.187. *EPICALIA NYCTIMUS*.

Epicalia nyctimus, Westwood, Gen. Diurn. Lepid. p. 257. n. 1 (1850); Hewitson, Ex. Butt. i. *Epic.* pl. 2. figs. 5, 6 (1852).

188. *EPICALIA PIERRETHI*.

Epicalia pierrethi, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 29. fig. 4 (1850).

189. *EPICALIA OBRINUS*.

Papilio obrinus, Linnæus, Mus. Lud. Ulr. p. 255 (1764); Clerck's Icones, pl. 31. figs. 2, 3 (1764).

Genus 58. *AGERONIA*, Hübner.190. *AGERONIA FERONIA*.

Papilio feronia, Linnæus, Mus. Lud. Ulr. p. 283 (1764); Clerck's Icones, pl. 31. fig. 1 (1764).

191. *AGERONIA FORNAX*.

Ageronia fornax, Hübner, Samml. ex. Schmett. (1816-24); Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 10. fig. 1 (1847).

192. *AGERONIA AMPHINOME*.

Papilio amphinome, Linnæus, Syst. Nat. I, ii. p. 779. n. 176 (1766); Cramer, Pap. Exot. i. pl. 54. figs. E, F (1779).

193. *AGERONIA CENOË*.

Ageronia cenoë, Boisduval, Lép. Guat. p. 26 (1870).

Genus 59. *DIDONIS*, Hübner.194. *DIDONIS PASIRA*.

Didonis pasira, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 31. fig. 2 (1848).

Genus 60. SMYRNA, Hübner.

195. SMYRNA BLOMFILDIA.

Papilio blomfildia, Fabricius, Sp. Ins. ii. p. 84. n. 370 (1781);
Hübner, Samml. ex. Schmett. (1816-41).

Genus 61. PYRRHOGYRA, Hübner.

196. PYRRHOGYRA EDOCLA.

Pyrrhogyra edocla, Doubleday & Hewitson, Gen. Diurn. Lepid.
pl. 32. fig. 5 (1850).

197. PYRRHOGYRA OTOLAIS.

Pyrrhogyra otolais, Bates, Ent. Mo. Mag. i. p. 126. n. 52
(1864).

P. neis of Felder seems identical with this species.

Genus 62. MICROTIA, Bates.

198. MICROTIA ELVA.

Microtia elva, Bates, Ent. Mo. Mag. i. p. 83. n. 39 (1864).

Genus 63. PHYCIODES, Hübner.

199. PHYCIODES CLAUDINA.

Acræa claudina, Eschscholtz, Kotzeb. Reise, iii. p. 212, pl. 8.
figs. 18 a, b (1821).

200. PHYCIODES NIVEONOTIS.

Phyciodes niveonotis, Butler & Druce, Cist. Ent. v. p. 100 (July
1872).

201. PHYCIODES? NIGRIPENNIS.

Eresia nigripennis, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. iv.
p. 170. n. 14 (1869).

202. PHYCIODES CRITHONA.

Melitæa crithona, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii.
p. 415. n. 46 (Sept. 1869).

203. PHYCIODES HERA.

Papilio hera, Cramer, Pap. Exot. iii. pl. 253. figs. F, G (1782).

204. PHYCIODES ARDYS.

Eresia ardys, Hewitson, Ex. Butt. iii. *Eres.* pl. 5. figs. 35, 36
(1864).

205. PHYCIODES OTANES.

Eresia otanes, Hewitson, Ex. Butt. iii. *Eres.* pl. 6. fig. 47 (1864).

206. PHYCIODES FULVIPLAGA.

Phyciodes fulviplaga, Butler, Cist. Ent. iv. p. 77 (1872); Lep.
Exot. pl. lxiii. fig. 2 (1874).

This species is very distinct from any species previously known.

Genus 64. CLOTHILDA, Blanchard.

207. CLOTHILDA INSIGNIS.

Clothilda insignis, Salvin, Trans. Ent. Soc. p. 394. n. 4 (1869).

Genus 65. EUNICA, Hübner.

208. EUNICA ANNA.

Papilio anna, Cramer, Pap. Exot. iii. pl. 231. figs. A, B (1782).

209. EUNICA AUGUSTA.

Eunica augusta, Bates, Ent. Mo. Mag. iii. p. 135. n. 106 (1866).

Genus 66. CYCLOGRAMMA, Doubleday.

210. CYCLOGRAMMA PANDAMA.

Cybdelis pandama, Doubleday & Hewitson, Gen. Diurn. Lepid. p. 219, pl. 27. fig. 5 (1848).

Genus 67. CHLOSYPNE, Butler.

211. CHLOSYPNE LACINIA.

Araschnia lacinia, Hübner, Zutr. ex. Schmett. figs. 899, 900 (1837).

212. CHLOSYPNE JANAIS.

Papilio janaïs, Drury, Ill. Ex. Ent. iii. pl. 17. figs. 5, 6 (1782).

213. CHLOSYPNE ERODYLE.

Synchloë erodyle, Bates, Ent. Mo. Mag. i. p. 84. n. 41 (1864).

214. CHLOSYPNE HIPPODROME.

Araschnia hippodrome, Hübner, Zutr. ex. Schmett. figs. 863, 864 (1837).

215. CHLOSYPNE NARVA.

Papilio narva, Fabricius, Ent. Syst. 3, i. p. 249. n. 775 (1793).

216. CHLOSYPNE GAUDIALIS.

Synchloë gaudialis, Bates, Ent. Mo. Mag. i. p. 84. n. 40 (1864).

Genus 68. EUPTOIETA, Doubleday.

217. EUPTOIETA HEGESIA.

Papilio hegesia, Cramer, Pap. Exot. iii. pl. 209. figs. E, F. (1782).

Genus 69. DIONE, Hübner*.

218. DIONE MONETA.

Dione moneta, Hübner, Samml. ex. Schmett. (1816-24).

Agraulis glycera, Felder, Wien. ent. Mon. v. p. 102. n. 75 (1861).

* All the species of this genus are congeneric, so that *Agraulis* is a synonym. Mr. Wallace's objection respecting the value of Hübner's descriptions has no weight; it is enough that the genera were described.

219. DIONE VANILLÆ.

Papilio vanillæ, Linnæus, Mus. Lud. Ulr. p. 306 (1764);
Clerck's Icones, pl. 40. fig. 2 (1764).

220. DIONE JUNO.

Papilio juno, Cramer, Pap. Exot. iii. pl. 215. figs. B, C (1782).

Genus 70. COLÆNIS, Hübner.

221. COLÆNIS PHÆRUSA.

Papilio phærusa, Linnæus, Mus. Lud. Ulr. p. 293 (1764).
Papilio phærusa, Cramer, Pap. Exot. ii. pl. 130. figs. B, C
(1779).

222. COLÆNIS JULIA.

Papilio julia, Fabricius, Syst. Ent. p. 509. n. 281 (1775);
Hübner, Samml. ex. Schmett. (1806-16).

223. COLÆNIS DELILA.

Papilio delila, Fabricius, Syst. Ent. p. 510. n. 284 (1775).
Papilio cellene, Cramer, Pap. Exot. iii. pl. 215. figs. D, E (1782).

Genus 71. ERESIA, Boisduval.

224. ERESIA EUNICE.

Nereis fulva eunice, Hübner, Samml. exot. Schmett. (1806-16).

225. ERESIA DISMORPHINA.

Eresia dismorphina, Butler, Cist. Ent. iv. p. 78 (Jan. 1872); Lep.
Exot. pl. lxiii. fig. 1 (1874).

226. ERESIA ERANITES.

Eresia eranites, Hewitson, Ex. Butt. ii. *Eres.* pl. 2. figs. 8-10
(1857).

227. ERESIA NAUPLIA.

Papilio nauplia, Linnæus, Mus. Lud. Ulr. p. 309 (1764); Clerck's
Icones, pl. 46. fig. 1 (1764).

Subfamily HELICONINÆ, Bates.

Genus 72. EUEIDES, Hübner.

228. EUEIDES LINEATA.

Eueides lineata, Salvin and Godman, Ann. & Mag. Nat. Hist.
ser. 4, vol. ii. p. 145. n. 9 (1868).

229. EUEIDES VIBILIA.

Cethosia vibilia, Godart, Enc. Méth. ix. p. 245. n. 6. (1819);
Hübner, Zutr. ex. Schm. figs. 449, 450 (1825) [*Colænis vibilia*].

230. EUEIDES CLEOBÆA.

Eueides cleobæa, Hübner, Zutr. ex. Schm. figs. 601, 602 (1832).

231. EUEIDES VULGIFORMIS.

Eueides vulgiformis, Butler & Druce, Cist. Ent. v. p. 102 (July 1872).

Genus 73. HELICONIUS, Fabricius.

232. HELICONIUS CHARITHONIA.

Papilio charithonia, Linnæus, Syst. Nat. 1, ii. p. 757. n. 65 (1767); Cramer, Pap. Exot. ii. pl. 191. fig. F (1779).

233. HELICONIUS PACHINUS.

Heliconius pachinus, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 414. n. 42 (1871).

234. HELICONIUS GALANTHUS.

Heliconius galanthus, Bates, Ent. Mo. Mag. i. p. 58. n. 29 (1864).

235. HELICONIUS CYDNO.

Heliconia cydno, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 15. fig. 3 (1847).

236. HELICONIUS RHEA.

Papilio rhea, Cramer, Pap. Exot. i. pl. 54. figs. C, D (1779).

237. HELICONIUS PETIVERANA.

Heliconia petiverana, Doubleday, Gen. Diurn. Lepid. p. 103. n. 18 (1847).

238. HELICONIUS ERATO.

Papilio erato, Linnæus, Mus. Lud. Ulr. p. 231 (1764); Clerck's Icones, pl. 40. fig. 1 (1764).

239. HELICONIUS MONTANUS.

Heliconius montanus, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 414. n. 41 (1871).

240. HELICONIUS ZULEIKA.

Heliconia zuleika, Hewitson, Ex. Butt. i. *Hel.* pl. 3. fig. 10 (1854).

241. HELICONIUS FORMOSUS.

Heliconius formosus, Bates, Ent. Mo. Mag. iii. p. 87. n. 96 (1866).

242. HELICONIUS TELCHINIA.

Heliconia telchinia, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 14. fig. 4 (1847).

243. HELICONIUS ROSINA.

Heliconia rosina, Boisduval, Lép. Guat. p. 29 (1870).

Subfamily ACRÆINÆ, Bates.

Genus 74. ACTINOTE, Hübner.

244. ACTINOTE NOX.

♂. *Acræa nox*, Bates, Ent. Mo. Mag. i. p. 59. n. 33 (1864).

♀. *Acræa leucomelas*, Bates, l. c. n. 32 (1864).

Acræa orizava, Reakirt, Proc. Acad. Nat. Sci. Phil. p. 243. n. 13 (1866).

Reakirt separated his *A. orizava* from *A. leucomelas* by characters which are purely individual and not locally constant.

245. ACTINOTE THALIA.

Papilio thalia, Linnæus, Mus. Lud. Ulr. p. 230 (1764); Clerck's Icones, pl. 43. fig. 2 (1764).

Family ERYCINIDÆ, Swainson.

Subfamily LIBYTHÆINÆ, Bates.

Genus 75. LIBYTHEA, Fabricius.

246. LIBYTHEA CARINENTA.

Papilio carinenta, Cramer, Pap. Exot. ii. pl. 108. figs. E, F (1779).

Subfamily NEMEBIINÆ, Bates.

Genus 76. EURYBIA, Hübner.

247. EURYBIA JUTURNA.

Eurybia juturna, Felder, Reise der Nov. Lep. ii. p. 288. n. 372 ("1865").

Genus 77. MESOSEMIA, Hübner.

248. MESOSEMIA LAGORA.

Diophthalma lagora, Herrich-Schäffer, Ex. Schmett. figs. 43, 44 (1853).

249. MESOSEMIA TELEGONE.

Diophthalma telegone, Boisdual, Sp. Gén. Lép. i. pl. 21. fig. 2 (1836).

250. MESOSEMIA FREQUENS.

Mesosemia frequens, Butler & Druce, Cist. Ent. v. p. 104 (July 1872).

Subfamily EURYGONINÆ, Bates.

Genus 78. EURYGONA (Boisd.), Westwood.

251. EURYGONA CHRYSIPPE.

Eurygona chrysippe, Bates, Ent. Mo. Mag. iii. p. 154. n. 114 (1866).

Eurygona labiena, Hewitson, Ent. Mo. Mag. vi. p. 226 (1870).

252. EURYGONA REGIPENNIS.

Eurygona regipennis, Butler & Druce, Cist. Ent. v. p. 103 (July 1872).

253. *EURYGONA AURANTIA*.

Eurygona aurantia, Butler & Druce, Cist. Ent. v. p. 103 (July 1872).

Seems to mimic *Nelo chrysomela*, a new moth in the same collection.

Genus 79. *METHONELLA*, Westwood.254. *METHONELLA CHRYSOMELA*.

Methonella chrysomela, Butler, Cist. Ent. iv. p. 78 (Jan. 1872).

Previously in the collection of the British Museum from Bogota.

Subfamily *ERYCININÆ*, Bates.Genus 80. *LYMNAS*, Blanchard.255. *LYMNAS PIRE*.

Lymnas pire, Boisduval, Sp. Gén. Léop. i. pl. 20. fig. 1 (1836).

Genus 81. *HADES*, Westwood.256. *HADES NOCTULA*.

Hades noctula, Westwood & Hewitson, Gen. Diurn. Lepid. p. 435. n. 1, note, pl. 72. fig. 3 (1851).

Genus 82. *ITHOMEIS*, Bates.257. *ITHOMEIS EULEMA*.

Ithomeis eulema, Hewitson, Ex. Butt. iv. *Erycin*. pl. 2. fig. 1 (1870).

Genus 83. *ESTHEMOPSIS*, Felder.258. *ESTHEMOPSIS CLONIA*.

Esthemopsis clonia, Felder, Reise der Nov. Lep. ii. p. 306. n. 414, pl. 38. figs. 11, 12 ("1865").

Genus 84. *EMESIS*, Fabricius.259. *EMESIS TENEDIA*.

Emesis tenedia, Felder, Wien. ent. Mon. v. p. 99. n. 61 (1861).

260. *EMESIS CYPRIA*.

Emesis cypria, Felder, Wien. ent. Mon. v. p. 99. n. 62 (1861); Reise der Nov. Lep. ii. pl. 36. figs. 12, 13 ("1865").

261. *EMESIS OLIVÆ*.

Emesis olivæ, Butler & Druce, Cist. Ent. v. p. 103 (July 1872).

262. *EMESIS FUROR*.

Emesis furor, Butler & Druce, Cist. Ent. v. p. 104 (July 1872).

Genus 85. *CHARIS*, Hübner.263. *CHARIS ARGYRODINES*.

Charis argyrodines, Bates, Ent. Mo. Mag. iii. p. 154. n. 112 (1866).

Genus 86. LEMONIAS, Westwood.

264. LEMONIAS ADELINA.

Lemonias adelina, Butler, Cist. Ent. iv. p. 79 (Jan. 1872).

Section *Thisbe*, Hübner.

265. LEMONIAS IRENÆA.

♀. *Papilio irenæa*, Cramer, Pap. Exot. iv. pl. 328. figs. C, D (1782).

♂. *Papilio belise*, Cramer, l. c. pl. 376. figs. E, F (1782).

Genus 87. NYMPHIDIUM, Fabricius.

266. NYMPHIDIUM LYCORIAS.

Nymphidium lycorias, Hewitson, Ex. Butt. i. *Nymph.* pl. 1. figs. 7, 8 (1852).

267. NYMPHIDIUM ASCOLIA.

Nymphidium ascolia, Hewitson, Ex. Butt. i. *Nymph.* pl. 1. fig. 4 (1852).

Genus 88. PANDEMOS, Hübner.

268. PANDEMOS NYMPHIDIROIDES.

Pandemos nymphidioides, Butler, Cist. Ent. iv. p. 79 (Jan. 1872).

A very remarkable form brought home by Dr. van Patten; it is quite unlike any species previously known.

Family LYCÆNIDÆ, Stephens.

Subfamily LYCÆNINÆ, Butler.

Genus 89. EUMÆUS, Hübner.

269. EUMÆUS MINYAS.

Rusticus (adolescens) minyas, Hübner, Samml. ex. Schmett. (1806-16).

270. EUMÆUS TOXANA.

Eumæus toxana, Boisduval, Léop. Guat. p. 13 (1870).

Genus 90. LAMPIDES, Hübner.

271. LAMPIDES CASSIUS.

Papilio cassius, Cramer, Pap. Exot. i. pl. 23. figs. C, D (1775).
Lycæna marina of Reakirt is evidently this species.

272. LAMPIDES ZACHÆINA.

Lampides zachæina, Butler & Druce, Cist. Ent. v. p. 104 (July 1872); Lep. Exot. pl. lxvii. fig. 1 (1873).

Subfamily THECLINÆ, Butler.

Genus 91. STRYMON, Hübner.

273. STRYMON PASTOR.

Strymon pastor, Butler & Druce, Cist. Ent. v. p. 105 (July 1872); Lep. Exot. pl. lvii. fig. 5 (1873).

274. STRYMON AGRICOLOR.

Strymon agricolor, Butler & Druce, Cist. Ent. v. p. 105 (July 1872); Lep. Exot. pl. lvii. fig. 4 (1873).

275. STRYMON CÆLICOLOR.

Strymon cælicolor, Butler & Druce, Cist. Ent. v. p. 106 (July 1872); Lep. Exot. pl. lvii. fig. 6 (1873).

Genus 92. TMOLUS, Hübner.

276. TMOLUS TEMESA.

Thecla temesa, Hewitson, Descr. Lyc. p. 1. n. 2 (1868); Ill. Diurn. Lepid. pl. 52. figs. 284, 285 (1869).

277. TMOLUS TALAYRA.

Thecla talayra, Hewitson, Descr. Lyc. p. 1. n. 3 (1868); Ill. Diurn. Lepid. pl. 52. figs. 286, 287 (1869).

278. TMOLUS? GAUNA.

Thecla gauna, Boisduval, Lép. Guat. p. 16 (1870).

279. TMOLUS CROLINUS.

Tmolus crolinus, Butler & Druce, Cist. Ent. v. p. 107 (July 1872); Lep. Exot. pl. lvii. fig. 13 (1873).

280. TMOLUS INVISUS.

Tmolus invisus, Butler & Druce, Cist. Ent. v. p. 108 (July 1872); Lep. Exot. pl. lvii. fig. 12 (1873).

281. TMOLUS HALCIONES.

Tmolus halciones, Butler & Druce, Cist. Ent. v. p. 108 (July 1872); Lep. Exot. pl. lvii. fig. 9 (1873).

282. TMOLUS ISOBEON.

Tmolus isobea, Butler & Druce, Cist. Ent. v. p. 108 (July 1872); Lep. Exot. pl. lvii. fig. 2 (1873).

283. TMOLUS VESPASIANUS.

Tmolus vespasianus, Butler & Druce, Cist. Ent. v. p. 109 (July 1872); Lep. Exot. pl. lvii. fig. 7 (1873).

284. TMOLUS CHARICHLORUS.

Tmolus charichlorus, Butler & Druce, Cist. Ent. v. p. 109 (July 1872); Lep. Exot. pl. lvii. fig. 10 (1873).

285. TMOLUS DENARIUS.

Tmolus denarius, Butler & Druce, Cist. Ent. v. p. 109 (July 1872); Lep. Exot. pl. lvii. fig. 3 (1873).

286. TMOLUS VESULUS.

Papilio vesulus, Cramer, Pap. Exot. iv. pl. 340. figs. I, K (1782).

Genus 93. BITHYS, Hübner.

287. BITHYS? THARA.

Thecla thara, Hewitson, Ill. Diurn. Lepid. p. 83. n. 56, pl. 32. figs. 45, 46 (1867).

288. BITHYS AZURINUS.

Bithys azurinus, Butler & Druce, Cist. Ent. v. p. 107 (July 1872); Lep. Exot. pl. lvii. fig. 11 (1873).

289. BITHYS HESPERITIS.

Bithys hesperitis, Butler & Druce, Cist. Ent. v. p. 107 (July 1872); Lep. Exot. pl. lvii. fig. 14 (1873).

Genus 94. MITHRAS, Hübner.

290. MITHRAS AUGUSTINUS.

Mithras augustinus, Butler & Druce, Cist. Ent. v. p. 106 (July 1872); Lep. Exot. pl. lvii. fig. 8 (1873).

291. MITHRAS TOLMIDES.

Pseudolycaena tolmidès, Felder, Reise der Nov. Lep. ii. p. 247. n. 288, pl. 31. figs. 13, 14 ("1865").

292. MITHRAS DESDEMONA.

Thecla desdemona, Hewitson, Ill. Diurn. Lepid. p. 79. n. 37, pl. 45. figs. 189, 190 (1867).

Close to *P. tolmidès* and *ægides* of Felder.

293. MITHRAS ÆGIDES.

Pseudolycaena ægides, Felder, Reise der Nov. Lep. ii. p. 246. n. 286, pl. 31. figs. 3, 4 (1865).

294. MITHRAS? CALESIA.

Thecla calesia, Hewitson, Equat. Lep. p. 67. n. 121 (1870).

Genus 95. PANTHIADES, Hübner.

295. PANTHIADES TOGARNA.

Thecla togarna, Hewitson, Ill. Diurn. Lepid. p. 85. n. 65, pl. 33. figs. 52, 53 (1867).

296. PANTHIADES SITO.

Thecla sito, Boisduval, Sp. Gén. Lép. i. pl. 22. fig. 5 (1836).

Family PAPILIONIDÆ.

Subfamily PIERINÆ, Bates.

Genus 96. PEREUTE, Herrich-Schäffer.

297. PEREUTE CHAROPS.

Euterpe charops, Boisduval, Sp. Gén. Lép. i. p. 407. n. 3, pl. 18. fig. 1 (1836).

Genus 97. MYLOTHRIS, Hübner.

298. MYLOTHRIS MALENKA.

Pieris malenka, Hewitson, Ex. Butt. i. *Pier.* pl. 1. figs. 5, 6 (1852).

299. MYLOTHRIS ALETHINA.

Mylothris alethina, Butler, Cist. Ent. iv. p. 81 (Jan. 1872).

300. MYLOTHRIS VIARDI.

Pieris viardi, Boisduval, Sp. Gén. Lép. i. p. 439. n. 3 (1836).

Genus 98. EUTERPE, Swainson.

301. EUTERPE TEREAS.

Papilio tereas, Godart, Enc. Méth. ix. p. 38. n. 39 (1819).

Euterpe terea, Swainson, Zool. Ill. Ins. ii. pl. 74 (1831).

302. EUTERPE DISMORPHITES.

Euterpe dismorphites, Butler, Cist. Ent. iv. p. 80 (Jan. 1872).

Genus 99. HESPEROCHARIS, Felder.

303. HESPEROCHARIS CROCEA.

Hesperocharis crocea, Bates, Ent. Mo. Mag. iii. p. 49. n. 84 (1866).

304. HESPEROCHARIS COSTARICENSIS.

Hesperocharis costaricensis, Bates, Ent. Mo. Mag. iii. p. 49. n. 85 (1866).

Genus 100. CATASTICTA, Butler.

305. CATASTICTA OCHRACEA.

Euterpe ochracea, Bates, Ent. Mo. Mag. i. p. 31 (1864).

306. CATASTICTA NIMBICE.

Euterpe nimbice, Boisduval, Sp. Gén. Lép. i. p. 409. n. 6 (1836); Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 5. fig. 1 (1847).

307. CATASTICTA ARECHIZA.

Euterpe arechiza, Reakirt, Proc. Acad. Nat. Sci. Philad. p. 244. n. 15 (1866).

This species formerly stood in the Museum and several other collections as the *E. teutila* of Doubleday, near to which it is placed in

Kirby's Catalogue, p. 430 (see nos. 9 & 11); the latter, however, is the male of *C. sebennica*. This error probably occurred in consequence of the type not being marked; whilst *C. arechiza* bore a label, in Mr. White's handwriting, with the name *C. teutila* inscribed thereon.

308. *CATASTICTA POTAMEA*.

Euterpe potamea, Felder, Wien. ent. Mon. v. p. 78. n. 22 (1861).

309. *CATASTICTA THERESA*, n. sp.

Wings above sepia-brown; primaries with a broad cuneiform patch cut by the median nervure and its first and second branches, which are broadly black-brown; two subcostal spots placed transversely beyond cell, and a discal series of four to five squamose discal spots, ochraceous clay-colour; secondaries with central area to near base (interrupted by black nervures), four additional small discal spots, and three or four along anal margin ochraceous clay-colour: body black-brown, a yellow spot on pterygodes; sides of abdomen white: wings below altogether paler; primaries with all the spots enlarged, whitish towards costa, streaked with sulphur-yellow towards apex; apex white; a marginal series of hastate yellow spots; secondaries brown at base, interrupted by yellow streaks; a cuneiform white spot from præcostal nervelet; a curved central white band, broadest on costa, streaked with yellow and cut by the black nervures; area immediately beyond forming an irregular ill-defined pale brown band across end of cell; a discal series of dark brown spots, on one or both sides of which are yellow spots, and beyond which are some pearly-whitish streaks; a marginal series of subtriangular yellow spots; base margined with scarlet; body black-brown; venter white, with blackish longitudinal streak. Expanse 1 inch 11 lines.

310. *CATASTICTA SISAMNUS*.

Papilio sisamnus, Fabricius, Ent. Syst. 3, i. p. 44. n. 131 (1793).

Euterpe pitana, Felder, Reise der Nov. Lep. ii. pl. 23. figs. 9, 10 (1865).

311. *CATASTICTA ACTINOTIS*.

Catasticta actinotis, Butler, Cist. Ent. iv. p. 80 (Jan. 1872); Lep. Exot. pl. xliii. fig. 6 (1872).

312. *CATASTICTA EMERIS*.

Euterpe emeris, Boisduval, Sp. Gén. Lép. i. p. 408. n. 5 (1836).

Genus 101. *SPHÆNOGONA*, Butler.

313. *SPHÆNOGONA MEXICANA*.

Terias mexicana, Boisduval, Sp. Gén. Lép. i. p. 655. n. 3, pl. 19. fig. 1 (1836).

314. *SPHÆNOGONA LIMONEA*.

Terias limoneus, Felder, Wien. ent. Mon. v. p. 84. n. 43 (1861).

315. SPHÆNOGONA FABIOLA.

Terias fabiola, Felder, Wien. ent. Mon. v. p. 85. n. 44 (1861).

316. SPHÆNOGONA CONSTANTIA.

Terias constantia, Felder, Reise der Nov. Lep. ii. p. 200. n. 205 (1865).

Genus 102. TERIAS, Swainson.

317. TERIAS EUTERPE.

Colias euterpe, Ménétries, Bull. Mosc. p. 299. n. 13 (1832);
Nouv. Mém. Mosc. iii. p. 121, pl. 11. fig. 4 (1834).

318. TERIAS WESTWOODII.

Terias westwoodii, Boisduval, Sp. Gén. Lép. i. p. 666. n. 22 (1836).

Eurema dina, Hübner, Zutr. ex. Schm. figs. 951, 952 (1837).

319. TERIAS PERSISTENS.

Terias persistens, Butler & Druce, Cist. Ent. v. p. 110 (July 1872).

320. TERIAS CALCEOLARIA.

Terias calceolaria, Butler & Druce, Cist. Ent. v. p. 110 (July 1872).

321. TERIAS PALMYRA.

Terias palmyra, Poey, Mem. Cuba, pl. 24. figs. 4-6 (1851).

322. TERIAS EUGENIA, ? ♀.

Terias eugenia, Wallengren, Wien. ent. Mon. iv. p. 33. n. 2 (1860).

323. TERIAS SINOË.

Pieris sinoë, Godart, Enc. Méth. ix. p. 138. n. 66 (1819).

324. TERIAS ALBULA, var. MARGINELLA.

Terias marginella, Felder, Wien. ent. Mon. v. p. 97. n. 53 (1861).

325. TERIAS STYGMULA.

Terias stygmula, Boisduval, Sp. Gén. Lép. i. p. 661. n. 15 (1836);
Lucas, in Ramon de la Sagra's Hist. Cuba, vii. p. 505, pl. 16. figs. 1 & 1a (1856).

Genus 103. PYRISITIA, Butler.

326. PYRISITIA PROTERPIA.

Papilio proterpia, Fabricius, Syst. Ent. p. 478. n. 152 (1775);
Lucas, Lép. Exot. pl. 38. fig. 1 (1835) [*Terias proterpia*].

327. PYRISITIA GUNDLACHIA.

Terias gundlachia, Poey, Mem. Cuba, p. 246, pl. 24. figs. 1-3 (1851).

Genus 104. LEPTOPHOBIA, Butler.

328. LEPTOPHOBIA ELODIA.

Pieris elodia, Boisduval, Sp. Gén. Léop. i. p. 529. n. 134 (1836); Lucas, Ramon de la Sagra's Hist. Cuba, vii. pl. 15. figs. 3, 3a (1857).

329. LEPTOPHOBIA TENUICORNIS.

Leptophobia tenuicornis, Butler & Druce, Cist. Ent. v. p. 110 (July 1872); Lep. Exot. pl. xliii. fig. 4 (1872).

Genus 105. AMYNTHIA*, Swainson.

330. AMYNTHIA CLORINDE.

Colias clorinde, Godart, Enc. Méth. ix., Suppl. p. 813 (1823); Boisduval, Sp. Gén. Léop. i. pl. 19. fig. 4 (1836) [*Rhodocera clorinde*].

331. AMYNTHIA MÆRULA.

Papilio mæricula, Fabricius, Syst. Ent. p. 479. n. 157 (1775); Donovan, Ins. Ind. pl. 27. fig. 1 (1800).

Genus 106. MEGANOSTOMA, Reakirt.

332. MEGANOSTOMA CESONIA.

Papilio cesonia, Stoll, Suppl. Cr. pl. 41. figs. 2, 2b (1790).

333. MEGANOSTOMA HELENA.

Meganostoma helena, Reakirt, Proc. Ent. Soc. Philad. ii. p. 358. n. 2 (1863).

Genus 107. CALLIDRYAS, Boisduval.

334. CALLIDRYAS SENNÆ.

Papilio sennæ, Linnæus, Syst. Nat. 1, ii. p. 764. n. 103 (1767); Butler, Lep. Exot. viii. pl. 23. figs. 1-4 (April 1871).

335. CALLIDRYAS PHILEA.

Papilio philea, Linnæus, Syst. Nat. ii. p. 764. n. 104 (1766); Butler, Lep. Exot. ii. pl. 35. figs. 1-4 (1872).

A good series of *P. melanippe*, Cr. (both sexes), came with the typical form in Van Patten's collection.

Genus 108. APHRISSA, Butler.

336. APHRISSA STATIRA.

♀. *Papilio statira*, Cramer, Pap. Exot. ii. pl. 120. figs. C, D (1779).

♂. *Papilio alcmeone*, Cramer, Pap. Exot. ii. pl. 143. fig. E (1779).

* I find that the genus *Rhodocera* of Boisduval possesses characters which will fully justify its separation from this group.

Genus 109. PHÆBIS, Hübner.

Subgenus PHÆBIS, Butler.

337. PHÆBIS CIPRIS.

♀. *Papilio cipris*, Cramer, Pap. Exot. ii. pl. 99. figs. E, F (1779).

♂. *Papilio hersilia*, Cramer, l. c. pl. 173. figs. C, D (1779).

Dr. van Patten brought a long series of this species in both sexes, the white female being most common.

338. PHÆBIS TRITE.

Papilio trite, Linnæus, Mus. Lud. Ulr. p. 248 (1764); Cramer, Pap. Exot. ii. pl. 141. figs. C, D (1779).

The white female appears to be more common than the yellow.

Subgenus METURA, Butler.

339. PHÆBIS INTERMEDIA.

♂ ♀. *Callidryas intermedia*, Butler, Cist. Ent. iv. p. 81 (Jan. 1872); Lep. Exot. pl. lv. figs. 5-8 (1874).

340. PHÆBIS VIRGO.

♂ ♀. *Callidryas virgo*, Butler, Trans. Ent. Soc. p. 9. n. 1 (1870); Lep. Exot. x. pl. 29. figs. 1-4 (1871).

This species was common in the collection.

341. PHÆBIS RURINA.

Callidryas rurina, Felder, Wien. ent. Mon. v. p. 82. n. 36 (1861); Reise der Nov. Lep. ii. p. 194. n. 193, pl. 26. figs. 9-11 ("1865").

Only one female of this species came amongst several hundreds of the males in Van Patten's collection; Mr. Buckley also took hardly any in Ecuador, although the males were exceedingly abundant.

Genus 110. PIERIS, Boisduval.

342. PIERIS JOSEPHINA.

Pieris josephina, Godart, Enc. Méth. ix. p. 158. n. 136 (1819); Hübner, Samml. ex. Schmett. (1819-1836) [*Cat. josephine*].

343. PIERIS NOTISTRIGA.

Pieris notistriga, Butler & Druce, Cist. Ent. v. p. 111 (July 1872).

344. PIERIS NOCTIPENNIS.

Pieris noctipennis, Butler & Druce, Cist. Ent. v. p. 111 (July 1872); Lep. Exot. pl. xliii. fig. 7 (1872).

Genus 111. APPIAS, Hübner.

345. APPIAS POEYI.

♂ ♀. *Appias poeyi*, Butler, P. Z. S. p. 49. n. 54 (1872).

♀. *Pieris ilaire*, Poey (nec Godart), Cent. Lep. (1833).

Genus 112. SYNCHLOË, Hübner.

346. SYNCHLOË MONUSTE.

Papilio monuste, Linnæus, Mus. Lud. Ulr. p. 237 (1764); Cramer, Pap. Exot. ii. pl. 141. fig. F (1779) [*P. monusta*].

Genus 113. DISMORPHIA, Hübner.

347. DISMORPHIA SORORNA.

♂ ♀. *Dismorphia sororna*, Butler, Cist. Ent. iv. p. 82 (1872); Lep. Exot. pl. xlv. figs. 1, 2 (1873).

348. DISMORPHIA CORDILLERA.

♂. *Leptalis cordillera*, Felder, Wien. ent. Mon. vi. p. 409. n. 108 (1862); Reise der Nov. Lep. ii. p. 145. n. 111, pl. 22. fig. 11 ("1865"); ♀ Butler, Cist. Ent. iv. p. 81 (1872).

349. DISMORPHIA DEIONE.

Leptalis deione, Hewitson, Ent. Mo. Mag. vi. p. 68 (1869); Ex. Butt. iv. Lep. pl. 6. figs. 37, 38 (1870).

350. DISMORPHIA AMPHIONE.

Papilio amphione, Cramer, Pap. Exot. iii. pl. 232. figs. E, F (1782).

351. DISMORPHIA HAGARESA.

Dismorphia hagaresa, Butler, Cist. Ent. iv. p. 82 (Jan. 1872); Lep. Exot. pl. xlv. fig. 3 (1873).

352. DISMORPHIA LUBINA.

Dismorphia lubina, Butler, Cist. Ent. iv. p. 83 (Jan. 1872); Lep. Exot. pl. xlv. figs. 6, 7 (1873).

353. DISMORPHIA VIRGO.

Leptalis virgo, Bates, Ent. Mo. Mag. i. p. 5. n. 9 (1864).

354. DISMORPHIA LUNINA.

Dismorphia lunina, Butler & Druce, Cist. Ent. v. p. 111 (July 1872); Lep. Exot. pl. xlv. figs. 8, 9 (1873).

355. DISMORPHIA NEMESIS.

Pieris nemesis, Latreille, Humb. Bonpl. Obs. Zool. ii. p. 78, pl. 35. figs. 7, 8 (1811-1819).

356. DISMORPHIA VIRIDIFASCIA.

Dismorphia viridifascia, Butler, Cist. Ent. iv. p. 83 (Jan. 1872); Lep. Exot. pl. xlvii. figs. 4, 5 (1873).

Interesting on account of the unusual colouring of the male and the dissimilarity of the female.

357. *DISMORPHIA CITRINELLA*.

Leptalis citrinella, Felder, Wien. ent. Mon. v. p. 77. n. 18 (1861).

358. *DISMORPHIA OTHOË*.

Leptalis othoë, Hewitson, Trans. Ent. Soc. ser. 3, vol. v. p. 562. n. 3 (1867); Ex. Butt. iv. *Lep.* pl. 5. figs. 26-28 (1870).

359. *DISMORPHIA PALLIDULA*, n. sp.

♂ ♀. Wings above black-brown, more or less greyish towards base of primaries and inner margin of secondaries; primaries with a broad oblique subovate postmedian costal spot, two small discal spots placed obliquely on each side of the lower radial, and a streak on centre of inner margin, creamy white; secondaries with a broad central patch, oval in male, subquadrate in female, creamy white; costal area of male with a large oval red-brown patch: wings below pale green; the white spots of upper surface indicated by a paler tint, and margined with squamose brown streaks; in the female the white band of primaries (which is larger than in the male) is clearly defined; the discal area and upper half of cell are also black-brown, and the base is greyish; body above greyish brown; pectus, palpi, and legs below clothed with white hairs; abdomen with pale yellow ventral streak. Expanse, ♂ 1 inch 9 lines, ♀ 1 inch 10 lines.

A pretty little species, allied to *D. othoë* of Hewitson.

360. *DISMORPHIA FORTUNATA*.

Leptalis fortunata, Lucas, Ann. Soc. Ent. France, p. 55, pl. 3. fig. 1 (1854).

Subfamily PAPILIONINÆ, Bates.

Genus 114. *PAPILIO*, Linnæus.361. *PAPILIO IPHIDAMAS*.

Papilio iphidamas, Fabricius, Ent. Syst. 3, i. p. 17. n. 52 (1793).

Differs from typical form in having only three red spots on upper surface of hind wings and two white spots on under surface of front wings.

362. *PAPILIO LYCIMENES*.

Papilio lycimenes, Boisduval, Lép. Guat. p. 7 (1870).

Papilio iphidamas, Gray (*nec* Fabr.), Cat. Lep. Ins. B. M. i. p. 44. n. 225, pl. 8. figs. 1, 2 (1852).

363. *PAPILIO ERITHALION*.

Papilio erithalion, Boisduval, Sp. Gén. Lép. i. p. 295. n. 125 (1836); Felder, Reise der Nov. Lep. i. p. 25. n. 15, pl. 16. fig. d (1865).

364. *PAPILIO PHOTINUS*.

Papilio photinus, Doubleday, Ann. & Mag. Nat. Hist. xiv. p. 415 (1844); Gray, Cat. Lep. Ins. B. M. i. p. 65. n. 287, pl. 11. fig. 2 (1852).

365. *PAPILIO MYLOTES*.

Papilio mylotes, Bates, Trans. Ent. Soc. ser. 3, vol. v. p. 346, note (1861).

366. *PAPILIO PHILENOR*.

Papilio philenor, Linnæus, Mant. Plant. p. 535 (1771); Smith & Abbot, Lep. Georg. i. pl. 3 (1797).

367. *PAPILIO POLYDAMAS*.

Papilio polydamas, Linnæus, Mus. Lud. Ulr. p. 192 (1764); Drury, Ill. Ex. Ent. i. pl. 17. figs. 1, 2 (1773).

368. *PAPILIO CLUSOCULIS*.

Papilio clusoculis, Butler, Cist. Ent. iv. p. 85 (Jan. 1872); Lep. Exot. pl. lviii. fig. 2 (1874).

369. *PAPILIO BRANCHUS*.

♀. *Papilio branchus*, Doubleday, Ann. & Mag. Nat. Hist. xviii. p. 373 (1846); Gray, Cat. Lep. Ins. Brit. Mus. i. p. 62. n. 277, pl. 7. fig. 3 (1852).

Slightly larger than the type; this species is almost exactly alike in both sexes. It is represented in the collection of the British Museum from Guatemala, Polochic valley, &c.

370. *PAPILIO RHODOSTICTUS*, n. sp.

Wings above sepia-brown, fringes varied with creamy whitish, an oblique bifid elongate cream-coloured spot crossing median nervure at end of cell in primaries; a large quinquefid rosy patch just beyond cell of secondaries, the two outer spots of the patch being very small, also a spot of the same colour at anal angle; body sepia-brown; head yellow-spotted; neck red-spotted: wings below altogether lighter in tint, primaries becoming paler towards apex; a trifold creamy transverse oblique patch, cut by the median nervure and second median branch; secondaries with an oblique postmedian series of four rosy spots placed between the median branches and the radials immediately beyond cell; a discal waved or subangulated series of seven rosy spots, the first three parallel to margin, and small, the fourth larger, the fifth and sixth large, irrorated with whitish internally, and touching the postmedian series, the seventh large, but divided by a central black bar into two small spots, the apical spot irrorated with white; fringe at anal angle reddish; body brown, thorax spotted with orange. Expanse 3 inches 5 lines.

Belongs to the *P. anchisiades* group.

371. *PAPILIO SERVILLEI*.

Papilio servillei, Godart, Enc. Méth. ix. Suppl. p. 809 (1823).

Papilio columbus, Kollar, Denkschr. Akad. Wiss. Wien, math.-nat. Cl. i. p. 351. n. 1, pl. 42. figs. 1, 2 (1850).

372. *PAPILIO ORABILIS*.

Papilio orabilis, Butler, Cist. Ent. iv. p. 84 (Jan. 1872); Lep. Exot. pl. lviii. fig. 1 (1874).

This was the finest of the *Papiliones* collected by Dr. van Patten.

373. *PAPILIO CALLISTE*.

Papilio calliste, Bates, Ent. Mo. Mag. i. p. 3. n. 5 (1864).

Papilio l'Orza, Boisduval, Insect. Agric. p. 103 (1869).

374. *PAPILIO MARCHANDII*.

Papilio marchandii, Boisduval, Sp. Gén. Lép. i. p. 350. n. 192 (1836).

375. *PAPILIO PENTHESILAUS*.

Papilio penthesilaus, Felder, Reise Nov. Lep. i. p. 52. n. 40, pl. 11. fig. C (1865).

376. *PAPILIO EPIDAUUS*.

Papilio epidaüs, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 3. fig. 1 (1846).

377. *PAPILIO THOAS*.

Papilio thoas, Linnæus, Mant. Plant. p. 536 (1771); Drury, Ill. Ex. Ent. i. pl. 22. figs. 1, 2 (1773).

378. *PAPILIO EROSTRATUS*.

Papilio erostratus, Westwood, Trans. Ent. Soc. v. p. 36, pl. 3. figs. 2, 2* (1847).

379. *PAPILIO LYCOPHRON*.

Heraclides lycophron, Hübner, Samml. ex. Schmett. (1816-1836).

380. *PAPILIO POLYCAON*.

Papilio polycæon, Cramer, Pap. Exot. iii. pl. 203. figs. A, B (1782).

Differs from the typical form in the broader central band, the spots of which touch the costa of front wings, and in having no spot on the tail.

381. *PAPILIO PANDION*.

Papilio pandion, Felder, Reise der Nov. Lep. i. p. 79. n. 61 (1865).

382. *PAPILIO IDÆUS*.

Papilio idæus, Fabricius, Ent. Syst. 3, i. p. 16. n. 48 (1793); Donovan, Ins. Ind. pl. 18. fig. 2 (1800).

383. *PAPILIO SADALUS*.

Papilio sadalus, Lucas, Rev. Zool. p. 133, pl. 10. fig. 4 (1852).

Genus 115. PYRRHOSTICTA*, Butler.

384. PYRRHOSTICTA LÆTITIA.

Papilio lætitia, Butler, Cist. Ent. iv. p. 84 (Jan. 1872).

Pyrrhosticta lætitia, Butler, Lep. Exot. pl. lvii. fig. 4 (1874).

385. PYRRHOSTICTA VULNERATA.

Papilio vulneratus, Butler, Cist. Ent. iv. p. 85 (Jan. 1872).

Pyrrhosticta vulnerata, Butler, Lep. Exot. pl. lviii. fig. 3 (1874).

Family HESPERIDÆ, Leach.

Genus 116. GONIURUS, Hübner.

386. GONIURUS PROTEUS.

Papilio proteus, Linnæus, Mus. Lud. Ulr. p. 333 (1764) ; Clerck's Icones, pl. 42. fig. 1 (1764).

387. GONIURUS SIMPLICIUS.

Papilio simplicius, Stoll, Suppl. Cram. pl. 39. figs. 6, 6 E (1790).

388. GONIURUS ALCÆUS?

Eudamus alcæus, Hewitson, Descr. Hesp. p. 3. n. 1 (1867).

389. GONIURUS ZILPA.

Goniurus zilpa, Butler, Lep. Exot. p. 109, pl. 40. fig. 2 (1872).

390. GONIURUS ALBOFASCIATUS.

Eudamus albofasciatus, Hewitson, Descr. Hesp. p. 3. n. 2 (1867).

391. GONIURUS EXADEUS.

Papilio exadeus, Cramer, Pap. Exot. iii. pl. 260. fig. C (1782).

Genus 117. EUDAMUS, Swainson.

392. EUDAMUS VECTILUCIS.

Eudamus vectilucis, Butler, Lep. Exot. p. 109, pl. 40. fig. 6 (1872).

Genus 118. TELEGONUS, Hübner.

393. TELEGONUS FULGURATOR.

Papilio fulgurator, Walch, Naturf. vii. p. 115, pl. 1. figs. 2 a, b (1775).

♂. *Hesperia mercatus*, Fabricius, Ent. Syst. 3, i. p. 332. n. 260 (1793).

* This genus can at once be detected by the serrated costa of the primaries in both sexes ; none of the species has a well-defined tail to the secondaries. There are, no doubt, plenty of characters by which *Papilio* may be subdivided : Mr. Scudder has commenced with the N. American species ; and it is to be hoped that others will soon follow his example, and thus reduce this unwieldy genus to something like a manageable compass.

394. TELEGONUS IMALENA.

Telegonus imalena, Butler, Lep. Exot. p. 109, pl. 40. fig. 1 (1872).

395. TELEGONUS ALARDUS.

Papilio alardus, Stoll, Suppl. Cram. pl. 39. figs. 7, 7 E (1790).

396. TELEGONUS CRETEUS.

Papilio creteus, Cramer, Pap. Exot. iii. pl. 284. figs. C, D (1782).

Papilio parmenides, Cramer, Pap. Exot. iv. pl. 364. figs. E, F (1782).

397. TELEGONUS ANAPHUS.

Papilio anaphus, Cramer, Pap. Exot. ii. pl. 178. fig. F (1779).

Genus 119. ÆTHILLA, Hewitson.

398. ÆTHILLA LAVOCHREA.

Æthilla lavochorea, Butler, Lep. Exot. p. 110, pl. 40. fig. 4 (1872).

In the British Museum from Mexico.

Genus 120. ARTEUROTIA, Butler & Druce.

399. ARTEUROTIA TRACTIPENNIS.

Arteurotia tractipennis, Butler & Druce, Cist. Ent. v. p. 112 (July 1872); Lep. Exot. pl. lxiv. fig. 5 (1874).

Genus 121. SPATHILEPIA, Butler.

400. SPATHILEPIA CLONIUS.

Papilio clonius, Cramer, Pap. Exot. i. pl. 80. figs. C, D (1779).

401. SPATHILEPIA TERRANEA.

Spathilepia terranea, Butler, Lep. Exot. p. 111, pl. 40. fig. 8 (1872).

In the British Museum from the Lower Amazons.

Genus 122. AUGIADES, Hübner.

Section *Phanus*, Hübn.

402. AUGIADES VITREUS.

Papilio vitreus, Cramer, Pap. Exot. iv. pl. 365. fig. D (1782).

This appears to be a very common, widely spread, and variable species.

Genus 123. PYRRHOPYGA, Hübner.

403. PYRRHOPYGA THASUS.

Papilio thasus, Cramer, Pap. Exot. iv. pl. 380. figs. M, N (1782).

Genus 124. ERYCIDES, Hübner.

404. ERYCIDES VIDA.

Erycides vida, Butler, Cist. Ent. iv. p. 86 (Jan. 1872); Lep. Exot. pl. lxiv. fig. 4 (1874).

405. ERYCIDES SOCIUS.

Erycides socius, Butler & Druce, Cist. Ent. v. p. 112 (July 1872).

Genus 125. CARYSTUS*, Hübner.

406. CARYSTUS MINOS.

Hesperia minos, Latreille, Enc. Méth. ix. p. 756. n. 78 (1823).

407. CARYSTUS CORIDON.

Papilio coridon, Fabricius, Syst. Ent. p. 533. n. 385 (1775); Butler, Fabr. Cat. pl. 3. fig. 6 (1870).

408. CARYSTUS DECEPTUS.

Carystus deceptus, Butler & Druce, Cist. Ent. v. p. 112 (July 1872).

409. CARYSTUS EPICINCEA.

Carystus epicincea, Butler & Druce, Cist. Ent. v. p. 113 (July 1872).

410. CARYSTUS GEMMATUS.

Carystus gemmatus, Butler, Cist. Ent. iv. p. 86 (Jan. 1872); Lep. Exot. pl. lxiv. fig. 2 (1874).

A most beautiful and apparently rare species.

Genus 126. PROTEIDES, Hübner.

411. PROTEIDES IDAS.

Papilio idas, Cramer, Pap. Exot. iii. pl. 260. figs. A, B (1782).

412. PROTEIDES EVADNES.

Papilio evadnes, Cramer, Pap. Exot. iv. pl. 343. figs. G, H (1782).

Genus 127. PHLEBODES, Hübner.

413. PHLEBODES JUSTINOIDES.

Phlebodes justinoides, Butler & Druce, Cist. Ent. v. p. 113 (July 1872).

Genus 128. PAMPHILA, Fabricius.

414. PAMPHILA HALA.

Pamphila hala, Butler, Trans. Ent. Soc. p. 504 (1870).

* This name has been recently adopted by Dr. Stål for a genus of Homopterous insects.

415. PAMPHILA ZABULON.

Hesperia zabulon, Boisduval & Leconte, Lép. Am. Sept. pl. 76. figs. 6, 7 (1833).

Hesperia hobomok, Harris, Ins. Mass. p. 313, fig. 137 (1862).

Hesperia pocahontas, Scudder, Proc. Ess. Inst. iii. p. 171. n. 67 (1862).

Var. melan. *Hesperia quadraquina*, Scudder, Proc. Bost. Nat. Hist. Soc. xi. p. 381. n. 76 (1861).

416. PAMPHILA ARES.

Hesperia ares, Felder, Verh. zool.-bot. Ges. Wien, xii. p. 477. n. 65 (1862).

417. PAMPHILA ATHENION.

Talides athenion, Hübner, Samml. ex. Schm. (1816-41).

418. PAMPHILA VIBEX.

Thymeles vibex, Hübner, Zutr. ex. Schm. figs. 685, 686 (1832).

419. PAMPHILA UNIFORMIS.

Pamphila uniformis, Butler & Druce, Cist. Ent. v. p. 113 (July 1872).

420. PAMPHILA INIMICA.

Pamphila inimica, Butler & Druce, Cist. Ent. v. p. 114 (July 1872).

Genus 129. PYRGUS, Hübner.

421. PYRGUS SYRICHTUS.

Papilio syrictus, Fabricius, Syst. Ent. p. 534. n. 394 (1775).

Papilio orcus, Cramer, Pap. Exot. iv. pl. 334. figs. I-L (1782).

Pyrgus montivagus, Reakirt, Proc. Acad. Nat. Sci. Philad. p. 334. n. 33 (1866).

Genus 130. PYTHONIDES, Hübner.

422. PYTHONIDES TRYXUS.

Papilio tryxus, Cramer, Pap. Exot. iv. pl. 334. figs. G, H (1782).

423. PYTHONIDES SALLÉI.

Leucochitonea salléi, Felder, Reise der Nov. Lep. iii. p. 525. n. 723, pl. 74. fig. 25 (1867).

Genus 131. THANAOS, Boisduval.

424. THANAOS FUNERALIS.

Nisoniades funeralis, Scudder & Burgess, Ass. Hex. Ins. in Proc. Bost. Nat. Hist. Soc. xiii. p. 293 (1870).

Very similar to *T. tristis*, Boisd.

425. THANAOS INVISUS.

Thanaos invisus, Butler & Druce, Cist. Ent. v. p. 114 (July 1872).

Genus 132. PLESIONEURA, Felder.

426. PLESIONEURA ELIGIUS.

Papilio eligius, Cramer, Pap. Exot. iv. pl. 354. fig. H (1782).

Genus 133. ACHLYODES, Hübner.

427. ACHLYODES OBSCURUS.

Anastrus obscurus, Hübner, Samml. ex. Schm. (1816-41).

428. ACHLYODES OZOTES.

Achlyodes ozotes, Butler, Trans. Ent. Soc. p. 515 (1870).

429. ACHLYODES OZEMA.

Achlyodes ozema, Butler, Trans. Ent. Soc. p. 515 (1870).

430. ACHLYODES SEMPITERNUS.

Achlyodes sempiternus, Butler & Druce, Cist. Ent. v. p. 114 (July 1872).

431. ACHLYODES VIRIDICEPS.

Achlyodes viridiceps, Butler & Druce, Cist. Ent. v. p. 115 (July 1872).

Genus 134. HELIAS, Fabricius.

432. HELIAS PHALÆNOIDES.

Urbanus vetus phalænoides, Hübner, Samml. ex. Schmett. (1806-16).

433. HELIAS LACTIFERA.

Helias lactifera, Butler & Druce, Cist. Ent. v. p. 115 (July 1872).

Genus 135. ANTIGONUS. Hübner.

434. ANTIGONUS NEARCHUS.

Hesperia nearchus, Latreille, Humb. Bonpl. Obs. Zool. ii. p. 135, pl. 43. figs. 3, 4 (1811-23).

Since the above was written, Mr. Druce has received from Costa Rica and described three new species—*Papilio sadyattes*, *Eresia cœla*, and *Mesosemia ceropia* (see Ent. Mo. Mag. 1874, pp. 36, 37).

4. On some new Species of *Drassides*.

By the Rev. O. P. CAMBRIDGE, M.A., C.M.Z.S., &c.

[Received May 6, 1874.]

(Plates LI. & LII.)

Of the species (forty in number) described in the present paper from types in my own collection, thirty-nine are believed to have been hitherto unknown to science. *Nineteen* are from Egypt, *eleven* from Bombay (one of these, also in great abundance, from